

STUDIES IN THE LIABEAE (ASTERACEAE). VIII.

ADDITIONS TO LIABUM AND MUNNOZIA.

Harold Robinson

Department of Botany

Smithsonian Institution, Washington, D.C. 20560

Continuing studies in the Liabeae have revealed two additional undescribed species and one species in need of transfer.

Liabum nudicaule H. Robinson, sp. nov.

Plantae suffrutescentes terrestres 1-2 m altae? laxe ramosae. Caules subtiliter hexagonales glabri vel subglabri, nodis interdum disciferis, discis ca. 10 mm diam e petiolis discretis. Folia opposita, petiolis 2-6 cm longis superne anguste alatis; laminae ovatae vel late ovatae 5-16 cm longae et 3-13 cm latae base cuneatae vel subtruncatae ad medio distincte anguste acuminatae margine argute serrulatae apice anguste breviter acuminatae supra distincte sparse pilosae subtus canescititer tomentellae in nervis glabrescentes fere ad basem trinervatae, nervis lateralibus valde ascendentibus inferne e marginis remotis superne tenuibus 4/5 laminarum attingentibus. Inflorescentiae terminales dense cymosae, pedicellis 0-8 mm longis dense tomentosis, pilis rubescensibus et pilis arachoides albidis inmixtis. Capitula 6-7 mm alta et 7-9 mm lata. Squamae involucri 50-60 ca. 5-seriatae 1-5 mm longae anguste ovatae vel linearilanceolatae apice anguste acutae vel vix acuminatae plerumque virides extus glabris vel glabrescentes; cristae receptaculorum laciniatae ad 0.5 mm altae. Flores radii 25-30; corollae flavae, tubis 3 mm longis superne minute parce puberulis, limbis anguste ellipticis 5-6 mm longis et ca. 1 mm latis base minute puberulis. Flores disci 25-32; corollae flavae, tubis 1.5-2.5 mm longis subglabris, faucis 1.5 mm longis base indistinctis sparse puberulis, lobis 1.5 mm longis et 0.3 mm latis apice sublaevibus; thecae antherarum 2 mm longae; appendices antherarum oblongo-ovatae ca. 0.3 mm longae et 0.15 mm latae. Achaenia ca. 0.8 mm longis dense setifera; setae pappi longiores ca. 30 plerumque 4 mm longae apice non vel vix latiores, setae breviores paucæ angustæ ca. 0.5 mm longae. Grana pollinis ca. 25 μ diam.

TYPE: PERU: Junin: Prov. Tarma, Chanchamayo Valley above La Merced at Cumbre Yacumay near summit. Alt. ca. 2000 m. Flowers small, yellow. 15 August 1957. P.C.Hutchison 1191 (Holotype US). PARATYPE: PERU: Cuzco: Vilcabamba, Hacienda on Rio Chincha, about 6000 ft. Clumps on moist sunny slopes. Rays deep yellow. 17-26 July 1923. J.F.Macbride 5192 (US).

The new species is closely related to L. eggersii Hieron. of Ecuador but is most notably distinct in the lack of any dense arachnoid tomentum on the stems. Typical L. eggersii is a plant of lower elevations on the western side of the Andes and it has less ovate leaves with more truncate bases.

Munnozia liaboides (Less.) H.Robinson, comb. nov.

Album liaboides Less., Syn. Comp. 152. 1832.

Dr. Bertil Nordenstam of the Museum of Natural History in Stockholm has called my attention to the failure to give this name precedence in the generic revision (Robinson & Brettell, 1974) where it was treated as a synonym of M. lyrata (A.Gray) R.& B. Studies have now shown that the two species are not synonymous, M. lyrata being a typical Munnozia, and M. liaboides being a member of the subgenus Kastnera. It might be noted that the name Album would have priority over the name Kastnera at the generic level.

Munnozia campii H.Robinson, sp. nov.

Plantae scandentes usque ad 10 m altae. Caules fulvescentes teretes striati dense puberuli vel tomentelli, nodis non stipuliferis. Folia opposita, petiolis 2.0-4.5 mm longis non alatis; laminae herbaceae late deltoideae 6.5-11.0 cm longae et 3.5-8.5 cm latae base truncatae trinervatae margine utrinque 10-15 denticulatae apice acutae supra pilosae pilis apice minute glandulosis subtus pallide fulvo-tomentosae in nervis fulviores. Inflorescentiae in ramis terminales, pedicellis 2-10 mm longis subtomentellis. Capitula 7-9 mm alta et 8-10 mm lata. Squamae involucri ca. 24 ovatae vel lanceolatae inaequales ca. 4-seriatae 1-4 mm longae et 0.8-1.0 mm latae pallide virides in apicem atrovirides extus glabrescentes margine dense fimbriatae apice acutae; receptacula fimbriifera, fimbriis usque ad 2 mm longis. Flores radii ca. 10; corollae albae, tubis 3-4 mm longis superne puberulis, limbis 8-9 mm longis sparse glandulo-punctatis base puberulis. Flores disci 9-11; corollae albae, tubis 3-4 mm longis superne puberulis vel pilosis, faucis ca. 1 mm longis base dense pilosis, lobis ca. 2.5 mm longis glandulo-punctatis

apice breviter recurvatis; filamenta in parte superiore 0.35 mm longa; thecae ca. 2 mm longae, cellulis exothecialibus solum in parietibus transversalibus noduliferis; appendices ovatae ca. 0.5 mm longae et 0.275 mm latae. Achaenia ca. 1.2 mm longa ca. 8-costata subglabra superne paucے glandulifera; setae pappi ca. 40 plerumque 6 mm longae apice interdum incrassatae setae breviores paucae. Grana pollinis ca. 35 μ diam.

TYPE: ECUADOR: Santiago-Zamora ("Oriente"):

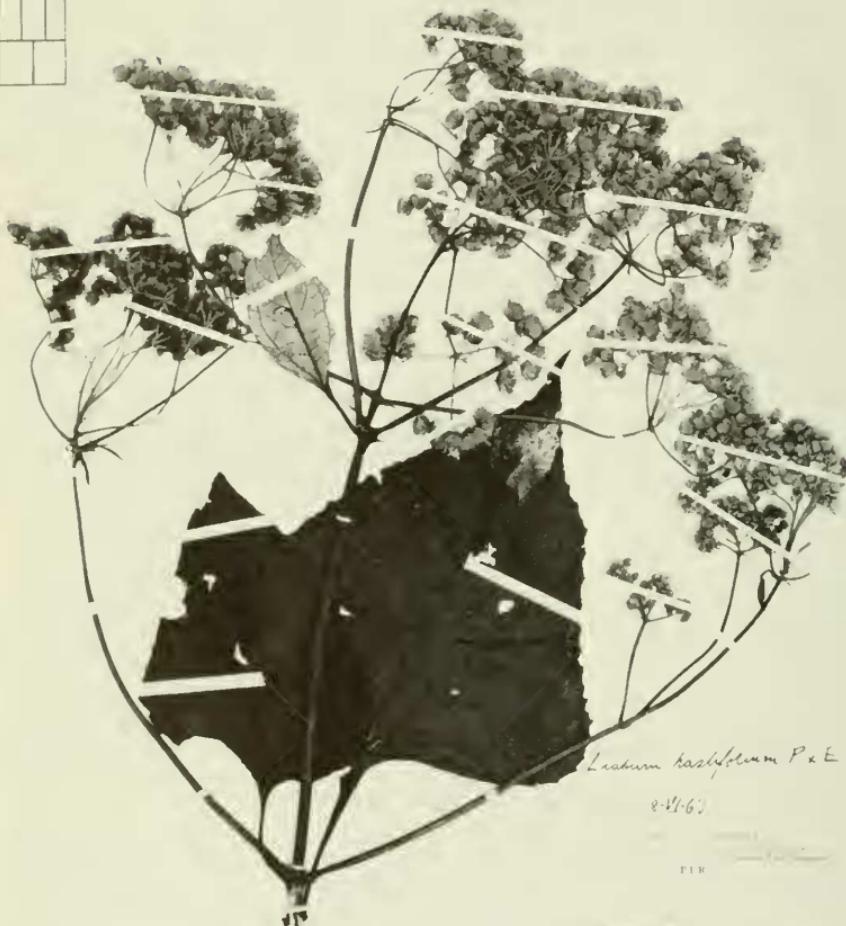
Eastern slopes of the cordillera, valley of the Rio Negro, down to the Rio Pailas (on the trail to Mendez). Near junction of rios Pailas and Negro. 6000-7500 ft. Hollow-stemmed vine with milky sap, climbing to 10 m. Lvs. deep green above; nearly white-pubescent below. Bracts pale green, the tips dark green. Corolla glistening white, style-branches white. Anthers black. Pappus white. 20-24 Aug. 1945. Coll. Francisco Prieto. W.H.Camp E-4934 (Holotype NY, isotype US).

Munnozia campii is closely related to M. jussieui (Cass.) R. & B. (= Liabum nonoense Hieron.). Dr. Keck who originally determined the material noted some of the differences in a note "Nearest L. nonoense Hieron. Differs 1f. blades deltoid-ovate, truncate at base, invol. bracts; pubescence of pedicels, etc., etc. . ." Not specified by Keck were two particularly significant differences, the lack of stipules on the nodes in M. campii and the presence of hairs on the upper surface of the leaves. In L. jussieui the stems always have stipules or a distinct ridge at the nodes, the leaf blades are ovate with less prominent angles, the upper surface is glabrous, the veins are trinervate from above the base of the blade with usually 1-2 pairs of weak secondaries below, the pedicels are completely covered with tomentum, and the phyllaries are lavender marginally. The heads of L. jussieui are generally larger with proportionately longer bracts.

The type locality is on the eastern slope of the eastern cordillera in the present province of Morona-Santiago about 25 km west of Mendez. The locality is more than 100 km south of the southernmost known locality of L. jussieui in Tungurahua.

Literature Cited

- Robinson, H. and R. D. Brettell 1974. Studies in the Liabeae (Asteraceae). II. Preliminary survey of the genera. *Phytologia* 28 (1): 43-63.



Liabum nudicaule H. Robinson, Holotype, United States National Herbarium. Photo by Victor E. Krantz, Staff Photographer, National Museum of Natural History.



PLANTS OF ECUADOR

W.H. Robinson 4934

Liabum

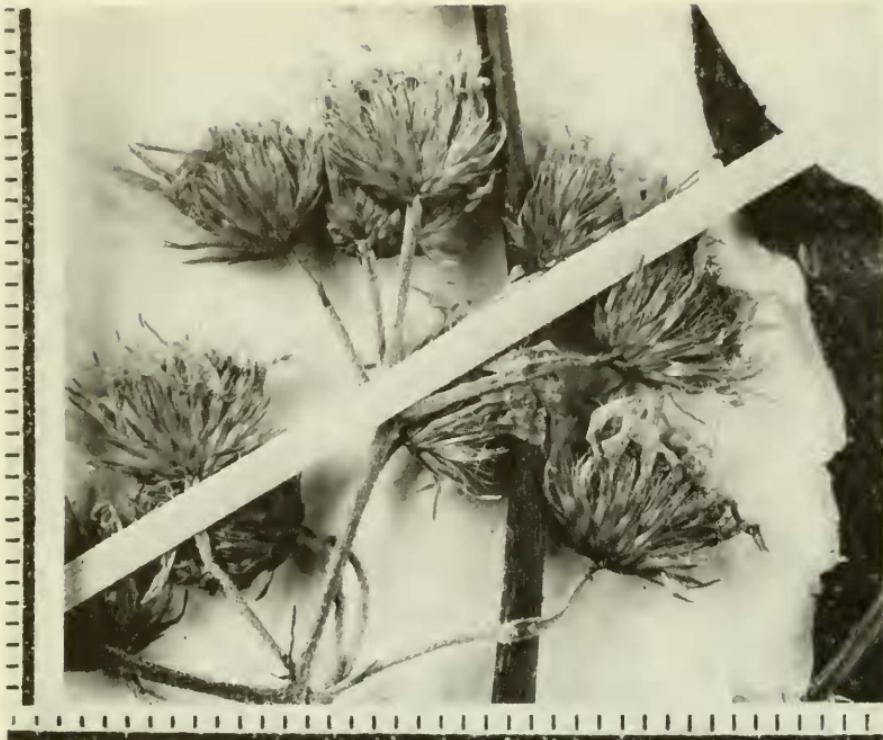
low-stemmed vine with milky sap, climbing 1 m. Lvs deep green above, nearly white-pubescent below, rachis pale green, the tips dark green. Corolla glistering white, style-fringed white. Anthers black. Papus white.
Near junction of rivers Palma and Negro.

Foto: W.H. ROBINSON, 1976

6000-7500 ft.

Munnozia campii H. Robinson
Specimen examined for a study of the Adonisaceae. See notes
C. Robinson

Munnozia campii H. Robinson, Holotype, New York Botanical Garden.



Enlargements of heads: Top. Liabum nudicaule.
Bottom. Munnozia campii.